

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Amended) A An isolated protein

- a) that has the ability to bind specifically to the an EDb-fibronectin domains domain;
- b) that is expressed or activated specifically in an endothelial cells cell;
- c) that is expressed or activated specifically in the a stromal cells cell of a tumor;
- d) that is expressed or activated specifically in a tumor cells cell;
- e) whose wherein binding of said protein to the EDb-fibronectin domains domain is inhibited by a polypeptide; and
- f) that has an apparent molecular weight of 120-130 kDa for the light chain and 150-160 kDa for the heavy chain, determined by SDS-polyacrylamide gel electrophoresis.

2. (Amended) A The isolated protein according to claim 1

- a) that has the ability to bind specifically to the EDb-fibronectin domains domain, whereby the binding region is characterized by at least one sequence that is selected from the group that comprises SEQ ID NOS: 1-3 comprises the sequence of SEQ ID NO:1;
- b) that is expressed or activated specifically in an endothelial cells cell;
- c) that is expressed or activated specifically in a stromal cells cell of a tumor;
- d) that is expressed or activated specifically in a tumor cells cell;
- e) whose wherein binding to the EDb-fibronectin domains domain is inhibited by a polypeptide that comprises the sequence that is selected from the group that comprises SEQ ID NOS: 1-3 of SEQ ID NO:1; and
- f) that has an apparent molecular weight of 120-130 kDa for the light chain and 150-160 kDa for the heavy chain, determined by SDS-polyacrylamide gel electrophoresis.

Reply Dated May 14, 2003

Reply to Office Action of January 14, 2003

3. (Amended) A The protein, according to claim 1,

- a) that has the ability to bind specifically to the EDb-fibronectin domains domain and that comprises the $\alpha 2\beta 1$ chain of the integrin;
- b) that is expressed or activated specifically in an endothelial cells cell;
- c) that is expressed or activated specifically in a stromal cells cell of a tumor;
- d) that is expressed or activated specifically in a tumor cells cell;
- e) whose wherein binding to the EDb-fibronectin domains domain is inhibited by a polypeptide and that comprises the α chain of the integrin; and
- f) that has an apparent molecular weight of 120-130 kDa for the light chain and 150-160 kDa for the heavy chain, determined by SDS-polyacrylamide gel electrophoresis.

4. (Amended) Protein The protein according to claim 1, characterized in that wherein the endothelial cells are cell is a proliferating endothelial cells cell.

5. (Amended) Proteinwhose specific binding to the EDb-fibronectin domains A protein that mediates the adhesion of an endothelial cells cell, a tumor-stromal cells cell and a tumor cells cell by specifically binding to the EDb-fibronectin domain.

6. (Amended) Protein whose specific binding to the EDb-fibronectin domains A protein that mediates the adhesion of an endothelial cells cell, a tumor-stromal cells cell and a tumor cells cell by specifically binding to the EDb-fibronectin domain, whereby the a binding region is characterized by at least one sequence that is selected from the group that comprises SEQ ID NOS: 1-3 of said protein comprises the sequence of SEQ ID NO:1.

7. (Amended) Protein The protein according to claim 6, wherein the binding region comprises the $\alpha 2\beta 1$ chain of the integrin.

8. (Amended) Protein whose specific binding to the EDb-fibronectin domains A protein that induces the proliferation of an endothelial cells cell by specifically binding to the EDb-fibronectin domain.

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9. (Amended) ~~Protein whose specific binding to the EDb-fibronectin domains A protein that induces the proliferation of an endothelial cells cell by specifically binding to the EDb-fibronectin domain, whereby the a binding region is characterized by at least one sequence that is selected from the group that comprises SEQ ID NOS: 1-3 of said protein comprises the sequence of SEQ ID NO:1.~~

10. (Amended) ~~Protein The protein according to claim 9, wherein the binding region comprises the $\alpha 2\beta 1$ chain of the integrin.~~

11. (Amended) ~~Protein whose specific binding to the EDb-fibronectin domains A protein that induces the proliferation, migration and differentiation of an endothelial cells cell in a collagen matrix by specifically binding to the EDb-fibronectin domain.~~

12. (Amended) ~~Protein whose specific binding to the EDb-fibronectin domains A protein that induces the proliferation, migration and differentiation of an endothelial cells cell in a collagen matrix by specifically binding to the EDb-fibronectin domain, whereby the a binding region is characterized by at least one sequence that is selected from the group that comprises SEQ ID NOS: 1-3 of said protein comprises the sequence of SEQ ID NO:1.~~

13. (Amended) ~~Protein The protein according to claim 12, wherein the binding region comprises the $\alpha 2\beta 1$ chain of the integrin.~~

14. (Amended) ~~Protein A protein that binds to the EDb-fibronectin domains domain and induces a specific signal transduction pathways pathway , whereby at least one gene is induced that codes for a protein that is selected from the group that comprises consisting of~~

- Focal adhesion kinase,
- CD6 ligand (ALCAM),
- the α chain of the vitronectin receptor,
- the integrated alpha 8 subunit, and
- a/the precursor(s) for follistatin-related protein.

15. (Amended) Protein A protein that binds to the EDb-fibronectin domains domain and induces a specific signal transduction pathways pathway, whereby at least one gene is induced that codes for a protein that is selected from the group that comprises consisting of

- Focal adhesion kinase,
- CD6 ligand (ALCAM),
- the α chain of the vitronectin receptor,
- the integrated alpha 8 subunit, and
- a/the precursor(s) for follistatin-related protein,

and whereby the a binding region is characterized by at least one sequence that is selected from the group that comprises SEQ ID NOS: 1-3 of said protein comprises the sequence of SEQ ID NO:1.

16. (Amended) Protein The protein according to claim 15, wherein the binding region comprises the $\alpha_2\beta_1$ chain of the integrin.

17-55. (withdrawn from consideration)